With the Compliments of the Medical Officer of Health.

County Borough of Wolverhampton.

Annual Report

UPON THE

HEALTH OF WOLVERHAMPTON

FOR THE YEAR 1896.

WOLVERHAMPTON:
JOHN STEEN AND CO., PRINTERS, OLD GRAMMAR SCHOOL.

County Borough of Wolverhampton.

REPORT

UPON THE

HEALTH OF WOLVERHAMPTON,

FOR THE YEAR 1896,

BY

HENRY MALET, B.A., M.D., B.Ch.,

MEDICAL OFFICER OF HEALTH.

PRINTED BY ORDER OF THE HEALTH COMMITTEE.

MEDICAL OFFICER'S REPORT,

1896.

PREVALENCE AND PREVENTION OF INFECTIOUS DISEASE.

Table 2 gives the weekly numbers of cases of certain diseases certified by Medical Men under the Infectious Diseases Notification Act. The crosses represent the degree to which the disease heading those columns prevailed—these are only rough approximations. Any certificate detected as erroneous before the close of the week is not entered.

Table 1 gives the total number of cases about which enquiries were made and which were recorded; no erroneous cases are entered in this Table.

Small-Pox —During the year we have had only three isolated cases. Two were from the Workhouse. 1st.—A girl aged 17 years, inmate since June, 1894, was found to have Small-Pox on February 6th, and at once removed to the Borough Hospital. There were no vaccination marks, but her mother said she had been vaccinated in four places in infancy, but that only one took. The case was at first rather severe, semi-confluent and suppuration began, but it then aborted, the pocks dried up; there was little permanent disfiguration. 58 days in Hospital. 2nd.—A woman, 21 years old, came from a common lodging house, ailing, into the Workhouse; two days later, on March 16th, was found to be Small-Pox, and removed to Borough Hospital. Four foveated vaccination marks, each size of 6d., a moderate crop of scattered pocks, no illness after onset. Only 26 days in Hospital. The third case was a tramp, aged 64 years, found in a common lodging house in the West Sub-District on May 11th by the Inspector, and at once reported by him and removed to the Borough Hospital. He had only been one night in the town; three weeks previously he had been for a fortnight in Gloucester, where the epidemic was then raging. When detected he was in the last stage of a very mild attack, having some dozen or so scabs still on him; so that he had been for about a fortnight at least carrying about infection. He had two small indefinite vaccination marks on the right shoulder, together about area of 3d. bit; and one better mark, size of 1s. on left shoulder. He said he had been told that when taken for inspection after vaccination on the right shoulder the doctor was not satisfied, and did him again on the left. He was only 9 days in Hospital. There were six other inmates at this lodging-house, four had been re-vaccinated, two vaccinated, one of the latter disappeared, the other declined re-vaccination.

Measles.—The Quarterly cases of, and deaths from, Measles since 1884 are as follows :—

	1884	1885	1886	1887
Cases	272, 710, 143, 2 ;	4, 2,...,17 ;	21, 9, 189, 959 ;	124, 17, 31, 22 ;
Deaths	11, 66, 20, 1 ;	1, .. ,...,... ;	..., .. , 8, 103 ;	19, 4, 7, 1 ;

	1888	1889	1890	1891
Cases	119, 149, 166, 435 ;	150, 228, 78, 141 ;	68, 45, 139, 230 ;	73, 4, 11, 275 ;
Deaths	9, 6, 5, 19 ;	10, 11, 11, 8 ;	3, 10, 5, 14 ;	5,..., ..., 20 ;

	1892	1893	1894
Cases	502, 415, 82, 33 ;	21, 18, 106, 248 ;	530, 294, 15, 4 ;
Deaths	21, 16, 3, 1 ;	6, ..., 5, 10 ;	46, 27, .. , ... ;

	1895	1896
Cases	2, 83, 215, 549 ;	159, 69, 36, 45.
Deaths	..., ..., 7, 33 ;	6, ..., 1, 1.

The epidemic of the close of 1895 lingered about Springfields and the North-East district generally until the middle of March; an outbreak that had occurred in the Brickkiln Street neighbourhood rapidly ceased. From this until the close of the year only a few cases were heard of. Measles is not reported by doctors under the Act; our cases are reported from the Schools, by the School Board Officers, or found by our own Inspectors. They are all inquired into and verified, as far as possible, by our Inspectors. Our returns include scarcely any cases amongst the better-off classes; they are only rough approximations to the real total number of cases.

The advantage of having Measles compulsorily notified by doctors is at present debated; some towns have adopted such notification. The proportion of our cases seen by doctors is so small (76 out of 309 this year) as to reduce any practical advantage from their notification to almost nothing. We would probably hear of more cases among the well-to-do; but these are just those that least need any assistance or advice.

Scarlet Fever.—We began recording our cases in 1884, but as we have only had notification since 1890 (inclusive) the returns before that year are probably less complete than those since. The death records in my possession go back to 1870; the following are the deaths since that year, and the known cases since 1884:—

	1870	1871	1872	1873	1874	1875	1876
Deaths	54,	26,	69,	121,	34,	26,	58.
	1877	1878	1879	1880	1881	1882	1883
Deaths	226,	40,	17,	39,	64,	27,	24.
	1884	1885	1886	1887	1888	1889	1890
Deaths	37,	46,	5,	16,	17,	6,	13.
Cases	212,	244,	47,	168,	194,	124,	500
	1891	1892	1893	1894	1895	1896	
Deaths	14,	3,	25,	55,	34,	21.	
Cases	419,	242,	623,	1096,	592,	372.	

The fatality varies in different periods, so that the deaths bear no ratio to the cases; as a rule with increased prevalence there is increased fatality, so that the higher death returns do not mean quite a proportionate increase in cases.

The following Table gives Quarterly particulars as to the cases in the two Sub-Districts. None of the cases in the General Hospital were sent in by us. The deaths are those of the cases reported in each Quarter, and sometimes occur later; they therefore do not correspond to the deaths in the Mortality Tables, which are those registered in each Quarter:—

Quarters.			1st	2nd	3rd	4th	Year.
East ...	Total ...	Cases ...	30*a*	20	40*b*	65*c*	155
		Deaths...	3	...	2	5	10
	Borough Hospital	Cases ...	27	18	37	49	131
		Deaths ...	3	...	2	3	8
	General Hospital	Cases ..	...	1	1	1	3
		Deaths ..	...	...	...	...	...
	At Home	Cases ...	2	1	2	15	20
		Deaths...	..	...	...	2	2
West ...	Total ...	Cases ..	42*d*	42	57	76	217
		Deaths...	2	...	5	4	11
	Borough Hospital	Cases ...	31	31	47	51	160
		Deaths ..	1	...	3	3	7
	General Hospital	Cases ..	...	...	...	1	1
		Deaths ..	...	...	...	...	...
	At Home	Cases ..	10	11	10	24	55
		Deaths...	1	...	2	1	4

(*a*) 7 were from the Workhouse ; 1 was kept there.
(*b*) 1 was from the Workhouse.
(*c*) 2 were from the Workhouse.
(*d*) One was in another Public Institution.

The reduction in Scarlet Fever since the maximum year 1894 has continued, and as the waves of this disease are usually of about four years duration we may have a still further fall.

The following is the summary of the apparent effects of removal and home care on the spread of the infection in the households attacked. No account is taken of houses where there is no susceptible child after the first case attacked; children who have already had Scarlet Fever being counted as insusceptible :—

East Sub-District.—During the year there were 68 instances in which no second case occurred after the removal to the Hospital of a first case. In these 68 houses there remained 165 children who had not previously had Scarlet Fever.

In two houses 2 children were taken ill simultaneously; they were removed, and 3 children remained free.

In 9 instances secondary cases occurred without Hospital removal, there were 10 such cases; they occurred at the following intervals after the previous case was taken ill :—two days, 2 cases; three and four days, 3 each; six and eight days, 1 each.

In most of these Hospital removal was ultimately resorted to, and in seven instances, where 18 susceptible children still remained, there was no further recurrence.

Thus in 77 instances there was no further case after Hospital removal, though 186 children remained in these houses.

In 5 instances further cases occurred *after* Hospital removal; 5 cases so occurring at the following intervals after the removal :— one day, one case; three days, 2; five and seven days, 1 each. The first three were probably infected before removal had taken place, so that only 2 cases can be suspected of being due to infection left behind, and even these may have been infected before the removal.

In these five houses there still remained 12 children who escaped. So that altogether 198 children escaped infection after Hospital removal.

In the East, cases were treated at home in only seventeen houses during the year; of these, in seven there was no other child; in three the other children (6) were at once sent away. In seven houses prolonged isolation was attempted, other children (11 in number) being kept at home. In three of these houses secondary cases occurred, 3 children being taken ill; the intervals after previous illness being three, nine, and fifty-three days.

West Sub-District.—There were 95 instances in which one case of Scarlet Fever was removed, and no other occurred. In these 95 houses there remained 276 susceptible children.

In one house 2 cases occurred simultaneously; these were removed, and 1 child remained unattacked.

In 11 instances secondary cases occurred without Hospital removal; there were 13 such cases; they occurred at the following intervals after the preceding case had been taken ill:—one and two days, 1 case each; three days, 4 cases; four, five, seven, ten, twelve, sixteen, and twenty-four days, 1 case each.

In many of these Hospital removal was ultimately effected; in six instances there was no recurrence, 16 children escaping.

Thus in 102 houses there was no further case after Hospital removal, though 293 remained.

In 9 houses further cases occurred after Hospital removal, 10 cases occurring at the following intervals after removal:—one and two days, 1 case each; nine days, 2 cases; thirteen, fifteen, seventeen, and twenty-three days, 1 each; twenty days, 2 cases. The first 2 cases were probably infected before removal had taken place; the last three were probably independent infection. At the most only 5 could be considered due to failure.

In 6 of these houses 13 children remained unattacked after final removal, so that altogether 206 children escaped infection after Hospital removal.

In the West cases were treated at home in 48 houses. In 21 there was no other susceptible child. In 6 the other children (10) were sent away. In 2 death was very early, in one of these a second occurred, but was at once removed. In 19 houses cases were isolated, other children (32) being kept at home. In 5 of these 19 houses second cases occurred (5 cases in all) at the following intervals after the preceding attack:—two, ten, thirteen, sixteen, and seventeen days.

The Summary for the Borough is as follows:—Hospital removal was effected in 193 houses. After the first removals there remained in these houses 519 children. In 179 of these houses there was no recurrence after removal, 479 children escaping. In only 14 houses was there recurrence, 15 further children being attacked. In these 14 houses 25 children still escaped after final Hospital removals. Of the 15 secondary cases 5 occurred within three days of the removal, and were probably infected before, so that only 10 may possibly have been due to infection left behind; three of these over 20 days after the removal, and were probably due to independent infection.

Cases were treated at home, with reasonable facility for isolation, in 26 houses, where there were 43 other children besides the primary cases. Secondary cases occurred in 8 of these houses, 8 cases occurring. 2 of these were within three days of the primary attack, and were probably infected before any care was taken; so that only 6 were possibly due to failure. The following Tabular Statement shows the results at a glance:—

	Hospital Removal.	Home Isolation.
Total houses	193	26
Cases recurred in	14 or 7·2%	8 or 30·7%
Number of children after primary cases	519	43
Number subsequently attacked ...	15 or 2·8%	8 or 18·6%
Number possibly due to failure ...	10 or 1·9%	6 or 13·9%
Number of children escaping ...	504 or 97·1%	35 or 81·3%

The following gives the total results for the three years, 1894. 1895, and 1896:—

	Hospital.	Home.
Total houses	998	98
Cases recurred in	112	47
Number of children after primary cases	2,904	217
Number of these attacked ...	145 or 4·9%	73 or 33·6%
Number possibly due to failure ...	70 or 2·4%	49 or 22·5%
Number of children escaping ..	2,759 or 95·0%	144 or 66·3%

I must refer to the comments in the 1895 Report, page 11; the above figures further confirm them.

Diphtheria.—The Quarterly cases of, and deaths from, Diphtheria in the Borough since 1890 have been :—

	1890.				1891.				1892.				1893.			
Cases	11,	3,	4,	5;	8,	8,	6,	11;	1,	7,	4,	4;	7,	5,	12,	11;
Deaths	3,	.. ,	...,	1;	1.	2,	1,	1;	....	3,	1,	...;	.. ,	1,	1,	3;

	1894.				1895.				1896.			
Cases	11.	16,	33,	22;	34,	78,	56,	140;	108,	101,	87,	64.
Deaths	5,	8,	10,	10;	19,	24,	14,	27;	19,	15,	9,	12.

The Annual cases and deaths in the Sub-Districts have been :—

		1890.	1891.	1892.	1893.	1894.	1895.	1896.
EAST	Cases	11	8	3	14	36	88	114
	Deaths	2	1	2	2	20	29	21
WEST	Cases	12	25	13	21	46	220	246
	Deaths	2	4	2	3	13	55	34

There has been considerable Quarterly decline in cases, and, excepting last Quarter, in deaths since the close of last year ; but the total number of cases (360) considerably exceeds last year's (308) ; there is a great discrepancy between these figures and the total deaths, which have actually fallen from 84 to 55. The most probable explanation of this is that many cases were overlooked during the first three Quarters of 1895 ; or, possibly, more doubtful cases reported this year. The Quarterly returns for the two years make this fairly evident ; for instance, the proportion of deaths to cases for the first Quarters, 19 to 34 in 1895 and 19 to 108 in 1896, can hardly be both correct.

As during last year, the only factor which was found in anyway to explain the prevalence of Diphtheria was that of personal infection from negligence. Numerous instances illustrative of this have been given in the Quarterly Reports ; not only have there been frequent recurrences of cases in a house but, in spite of the difficulty in doing so, direct personal infection has been traced in a large proportion of cases. A circular (of which a copy is appended) was issued early in the year giving instructions as to the precautions which should be observed in reference to Diphtheria ; a copy was sent to every medical man in the district, and subsequently a copy was left at every house where a case was reported. An arrangement was made with the General Hospital by which we secured Hospital Isolation for the cases which most urgently needed it, but this was not often required. Another circumstance commented on in last year's Report, and again constantly found this year, was the occurrence of previous sore throats in a house where Diphtheria was reported; as a rule, no doctor had seen such cases, and they illustrate the uncertainty of our Diphtheria returns, and one difficulty in preventing the extension of the disease; for many of these throats are undoubtedly cases of mild, overlooked, Diphtheria.

The following is the circular alluded to above:—

DIPHTHERIA.

Strict attention to a few simple precautions ought to almost completely limit the infection of this dangerous disease, which is very readily spread through error.

Seat of the Infection. This is mainly in the throat, mouth, and nose of the patient.

Duration of Infection. So long as there is the least soreness of throat, or soreness or discharge in connection with the nose, or swelling of any glands about the neck, the patient must be considered infectious. The patient should not be allowed about until the doctor gives permission.

The examination of the throat for the Diphtheria Bacillus is an additional safeguard, as the germs sometimes linger after apparent signs have gone.

Carriage of Infection. The most usual way of infection is directly from the patient; any inhaling of the breath, or contact, as in kissing, readily conveys the germs (*even after death*). Any discharge from the throat or nose may carry the infection on handkerchiefs or on clothes. Any article (spoon, cup, food, &c.) which has been in contact with the patient's mouth may convey germs.

Special Dangers. 1st.—Like other diseases, it varies in severity, and the absence of rash or other obvious symptoms causes mild cases to be overlooked by the public, and to be difficult of identification by the doctor;

and yet such cases infect others. 2nd.—Certain domestic animals, notably cats and fowl, take Diphtheria, and convey the infection to human beings ; children have frequently been infected thus.

Preliminary Precautions. Regard all cases of sore throat with caution, especially when Diphtheria is prevalent. At such times any sore throat of the least severity should be seen by a doctor ; this should never be neglected when there is any swelling of the glands of the neck or discharge from or soreness in the nose. And even the mildest sore throat, where there is a possibility of diphtheritic infection (as in a house where a case is or has lately been) should be examined by a doctor.

The examination of the throat for the Bacillus is an additional safeguard in such cases.

The following precautions should be carried out fully where practicable, and in any case should be adopted as fully as possible, for every precaution taken is some degree of prevention, and on account of the limited seat of the infection, partial care is far more valuable than it would be in a disease like Scarlet Fever for instance :—

Actual Precautions.

The Sick Room. The moment a case is pronounced to be Diphtheria, the patient should be separated as completely as possible from others; best in a room for the patient and nurse alone. This room should have a fire constantly burning, both for ventilation and to burn infected materials. Every article not actually necessary for the patient and nurse should be at once removed from the room. Better have no carpet, but a sound, impervious oil-cloth or linoleum covering on the floor is useful. A plain iron bedstead is the best ; there should be no needless hangings or curtains ; bed-clothes should be covered with a sheet instead of a quilt.

Nurse. If a professional nurse is not engaged, some one should be told off whose sole duty it will be to attend the patient ; *and no one else should approach the patient,*

Personal Care by Nurse. The nurse should wear, in the sick room, a linen (or cotton) overall, reaching below the dress, fastening closely at neck and wrists, and opening at the back; this should be taken off on leaving the room. The face should not be brought near the patient's in such a way as to risk inhaling his breath, or being spattered by cough or sneeze (for instance, fondling child patients, or nursing them in arms, should be abstained from).

After any immediate attendance on the patient the hands should be at once rinsed.

Care of Patient. All discharges from the patient's mouth or nose should be wiped away with rags, which should be at once burnt; if too abundant for this, they should be received into a vessel containing a disinfectant, and, if possible, burnt. The patient's motions and urine should be received into vessels containing disinfectants, and poured down the water-closet, which should then be well flushed.

Jeyes' fluid, and Izal, are non-poisonous, convenient, disinfectants; whatever disinfectant is used for above purposes, it should be the strongest mixture advised.

General Care. All fragments of food left by the patient should be burnt, this is best done in the sick room; *on no account should they be put where they may be taken by cats or fowl.*

All articles used by the patient (such as plate, cup, spoon, fork, &c.) should be boiled fast for a few minutes in water containing some washing soda before they are allowed to leave the sick room (this is far safer than any chemical disinfectant).

Soiled linen, sheets, &c., should be boiled with washing soda before being placed with other clothing.

Pet animals should be carefully kept out of the sick room.

Disinfection after. When the patient is finally pronounced free from infection, the room, bedding, &c., should be disinfected. This will be done by the Borough Officials on application to the Health Offices, Red Lion Street.

Subsequent Caution. For some months after a person has had Diphtheria, any attack of sore throat in them should be treated with great caution; for Diphtheria has recurred and proved infective even many months after the primary illness.

School Caution. As there is always some slight possibility that the germs may linger in the throat or nose after recovery, and as the intimate contact of children in school gives special facility for infection, it is best to keep away from school for at least four weeks after first being allowed about. And, during Diphtheria prevalence, a child should not be allowed to attend school with the least sore throat. 1st.—Because it might be Diphtheritic. 2nd.—Because if not, it would be a ready soil for Diphtheritic germs should the child happen to meet infection.

HENRY MALET,
Medical Officer of Health, Wolverhampton.

Typhoid Fever.—The cases and deaths for the last seven years are :—

		1890.	1891.	1892.	1893.	1894.	1895.	1896.
EAST ...	Cases	22	34	22	53	27	78	89
	Deaths	6	5	6	7	10	10	24
WEST ...	Cases	22	64	53	83	54	56	49
	Deaths	3	11	9	13	7	8	13
BOROUGH	Cases	44	98	75	136	81	134	138
	Deaths	9	16	15	23	17	18	37

We are usually exceedingly free from Typhoid Fever considering the proportion of our population living in very poor circumstances. This year's returns are most exceptionally heavy in the East Sub-District. This has not been due to any general prevalence of the disease, but to several small local outbreaks in which the only factor detected was that of personal infection, favoured by bad local surroundings in the form or poverty, squalor, and a tendency to overcrowding. The following instances illustrate the above; they are from the East Sub-District. A foul house, people dirty and careless; parents and four children (ages from 18 to 2½ years) slept in one room (others being insufficiently furnished) ; three of them had Typhoid Fever one after another. In a house with two bedrooms there were two families ; one, parents and four children ; the other, parents and two children ; three of the children had Typhoid Fever at short intervals. A lad had unrecognized Typhoid Fever, a neighbour who came in to nurse him got it, and then a younger brother. Eleven cases occurred at brief intervals in a short street where there was very free intercourse between the houses. In one ill-kept house with ten inmates, nine had Typhoid Fever consecutively. There were several other instances of two or three cases in one house. In the West, in two instances there were four consecutive cases in the one house, and there were several instances of second cases occurring.

The above shows that a considerable reduction might be made in the number of our Typhoid Fever cases by timely isolation of the primary case. But the fact is that this is not possible, for the primary case is very rarely reported early enough, partly because the doctor is not called in, partly because the diagnosis often takes time. In one way the Hospital treatment of the cases would be important, by ensuring the proper destruction of a large amount of infective material.

Our proportion of deaths to cases is very high, double that of last year ; in fact it is only in deaths that the year has been so exceptional, the cases being no more than in 1893 or 1895. At no time was there any cause for alarm, and the exceptional condition had quite ceased in the fourth Quarter.

Whooping Cough.—There was a great reduction from last year's returns, but the disease was more or less constantly present ; it was apparently rather prevalent in the West during the Second Quarter, causing twelve deaths ; the total deaths being 20 West and 8 East. Last year they were 19 West, 34 East.

Influenza.—Influenza was apparently slightly present during the first half of the year, and rather prevalent during the last two months.

Diarrhœa.—The returns under this heading are vague, as many deaths from Diarrhœa are returned under other headings.

The Annual deaths returned as from Diarrhœa since 1875 have been—

1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886
96	105	59	93	48	111	46	87	56	140	50	149

1887	1888	1889	1890	1891	1892	1893	1894	1895	1896
105	60	84	68	105	55	161	62	135	131

With three exceptions, heavy and light fatalities alternate, probably corresponding to hotter or colder years. The exceptions are 1875-6, 1886-7, and 1895-6. The deaths from all diseases that could be included under the heading Diarrhœa are given in Table 4 as Diarrhœal Diseases.

Our returns of *Diarrhœal* deaths since 1890, and the weekly means of the 4ft. earth temperature have been as follows; the figures in the columns after the second are the number of weeks the temperature in question reached to or above the degree at the head of the column without reaching the next degree.

	Deaths.	55°	56°	57°	58°
1890	87	3	3	6	—
1891	120	3	—	—	—
1892	67	3	—	—	—
1893	227	3	5	4	1
1894	99	8	2	—	—
1895	255	4	10	—	—
1896	199	6	7	1	—

The regular return of Diarrhœal deaths began early this year, the following gives the weekly deaths, and the weekly mean temperatures of the air and of the earth at 1ft. and 4ft. depth.

Week ending.	Deaths.	Temp. Air.	Temp. 1ft.	Temp. 4f.	Week ending.	Deaths.	Temp. Air.	Temp. 1ft.	Temp. 4ft.
		°	°	°			°	°	°
May 9	—	46·8	51·5	48·5	July 25	20	60·0	64·2	56·9
,, 16	—	54·3	56·7	49·5	Aug. 1	19	56·2	61·2	57·1
,, 23	—	51·7	57·5	51·0	,, 8	15	53·6	59·3	56·9
,, 30	—	51·2	57·0	51·7	,, 15	20	55·7	60·1	56·5
June 6	2	58·4	60 9	52·4	,, 22	15	55·2	59·5	56·5
,, 13	2	57·8	60·9	53·4	,, 29	7	53·2	59·4	56·5
,, 20	4	61·7	64·4	54·4	Sept. 5	5	53·1	57·5	56·2
,, 27	3	56·5	61·2	55·3	,, 12	3	55·4	58·1	55·8
July 4	5	55·6	61·2	55·5	,, 19	6	53·2	56·8	55.7
,, 11	12	58·8	63·0	55·8	,, 26	3	49·4	53 6	55·1
,, 18	11	59·2	64·3	56·4	Oct. 3	3	49·0	53 1	54·3

The Tables and remarks on page 19 of the 1895 Report should be read in connection with the above.

The excess of last year's Diarrhœal deaths over the present is mainly due to the low returns in the West Sub-district this year; the 1895 figures were, East, 144, West, 111; the 1896 are, East, 133, West, 66.

BOROUGH HOSPITAL.

The Quarterly numbers dealt with have been as follows:—

Quarters.	Remaining in from previous Quarter.	Admitted for		Total Discharged		Died.		Average No. of days in of the cases admitted.	Average daily No. of Patients in Hospital.
		Scarlet Fever.	Small Pox	Scarlet Fever.	Small Pox.	Scarlet Fever.	Small Pox.		
First ...	61	60*a*	2	91	..	7	...	47·3	39·5
Second ..	32	67*b*	1	54	3	2	...	46·7	30·5
Third ..	43	94*c*	...	96	...	5	...	44·6	48·5
Fourth ...	41	116*d*	...	117	...	5	...	44·4	54·2
Year ...	61	337	3	358	3	19	...	45·4	45·3

(*a*) 2 from Tettenhall.
(*b*) 16 from Tettenhall.
(*c*) 8 from Tettenhall.
(*d*) 6 from Tettenhall.

Leaving 40 cases of Scarlet Fever in the Hospital at the close of the year.

The particulars of the three Small-Pox cases have been already given.

The following are the summaries of the cases admitted in each Quarter as Scarlet Fever:—

First Quarter.—60 cases of Scarlet Fever were admitted. Of these 6 were fatal; the particulars were—A, 19 months old, double otorrhœa, toxæmia, 5 days in. B, 4 years old, naso-pharyngeal ulceration and adenitis, 19 days in. C, 3½ years old, severe Whooping Cough and convulsions, 5 days in. D, 1½ years, acute Pneumonia, about 3 hours in. E, 14 years old, attack of Diphtheria proved fatal in 36 hours, was 39 days in. F, 2 years old, very severe case, toxæmia, 16 days in.

There were 3 other very severe cases, and 11 severe. The principal complication were—Otorrhœa, in 5 cases. Rhinitis, 7. Adenitis, 4. Suppuration, 3. Eczema and Impetigo, 8. Nephritis, 1. Bronchitis, 1. Chorea, 1.

One child had a severe attack of Measles on January 26th, 28 days after admission. Secondary throats, 3 cases, one 10 days after admission on January 27th; one case was discharged on April 20th (to go out on the following day) apparently perfectly well, that evening he had Diphtheria which was fatal in 36 hours; the third case was one of ordinary Tonsillitis on April 24th, 35 days after admission. One case had septic cellulitis from a wound of the knee received some days before admission.

Second Quarter.—67 cases were admitted as Scarlet Fever, one proved not to be so. Of the 66 cases of Fever treated, all recovered. 4 were very severe, 14 severe. Complications—Otorrhœa, 4. Rhinitis, 6. Adenitis, 8. Suppuration, 3. Nephritis, 3. Onychia, 3. Iritis, 1. Whooping Cough, 1, detected on July 8th, 27 days after admission. Measles, 1, on August 11th, 57 days after admission (see next Quarter). There was a slight outbreak of Diphtheria; on account of the fatal case which developed on April 20th (see last Quarter) some cases of Scarlet Fever with severe naso-pharyngeal mischief and adenitis were examined for Diphtheria Bacillus, and in one pseudo-bacilli, in another, true bacilli were found; there was no previous suspicion of Diphtheria in these cases. On April 28th, a case 20 days in, had Diphtheria (bacilli found). June 17th, a case 40 days in, had a membranous throat (bacilli not found). July 20th, a case in since June 20th, had Diphtheria (bacilli found). July 23rd, a case in since June 25th, had membranous throat, very severe (bacilli not found)

Third Quarter.—94 cases were admitted as Scarlet Fever, 6 were not Scarlet Fever, but 3 of these got it; so that 91 cases were actually treated. Of these 5 were fatal. A, 3 years old; nephritis, 53 days in. B, 7 years old; came in with nephritis and Pneumonia, 10 days in. C, 4 years old, severe naso-pharyngeal ulceration, toxæmia, 14 days in. D, 5 years old, 18 days in, and E, 5 years old, 9 days in, same as last case.

Beside these there were 5 very severe, and 9 severe cases. Complications—Otorrhœa, 10. Rhinitis, 11, Adenitis, 15; one had severe sloughing. Suppuration, 5. Rheumatism, 4. Nephritis, 2. Iritis, 1. Onychiæ, 2. We had a small outbreak of Measles; a case of Scarlet Fever was admitted on August 1st, that had had Measles about July 18th; on August 11th, last Quarter's case had Measles, and on 13th, 17th, and 20th, three of present Quarter's cases got it; fortunately this was the extent of the outbreak. A case of Diphtheria occurred on August 26th, had been in since July 17th (bacilli found); a membranous sore throat on August 21st (bacilli not found); case in since July 27th. Two other slight secondary sore throats occurred on September 9th and 14th, in patients who had been in since July 31st and September 4th.

Fourth Quarter.—116 cases were admitted: 6 of these were only admitted into quarantine on suspicion, none of them were Scarlet Fever. Of the 110 cases admitted as Scarlet Fever, 6 proved not to be so; of these, 2 caught it; so that 106 cases were treated.

Seven were fatal.—A, 3 years, severity of attack, toxæmia, 3 days in. B, 4 years, toxæmia, purpura, melæna, 8 days in. C, 3 years; severe naso-pharyngeal mischief, toxæmia, 3 days in. D, — years, double otorrhœa, vomiting and diarrhœa, convulsions, probably pyæmia, 47 days in. E, 11 years, cellulitis, suppuration, pyæmia, 13 days in. F, 6 years, feeble child, Varicella, tubercular enteritis, 50 days in. G, 5 years, had Diphtheria as well as Scarlet Fever when admitted, 7 days in.

Eight other cases were very severe, and 8 severe. Complications—Otorrhœa, 4. Rhinitis, 9. Adenitis, 8. Suppuration, 6. Nephritis, 2. Purpura, 2. Rheumatism, 4. Diarrhœa and melæna, 2. Iritis, 1. Onychiæ, 4. There were 2 secondary membranous throats, Diphtheria bacilli not found in either; on November 28, case admitted October 26th; on December 21st, case admitted December 11th. One case was admitted as mentioned above with Diphtheria on December 28th.

We had a very troublesome outbreak of Varicella, ultimately affecting 27 of our patients. On November 25th, four cases occurred, had been admitted October 20th, 26th, 27th, and 30th; they were at once separated. On December 8th, seven cases occurred; December 9th, one; 11th, two; 12th, one; 21st, one; 22nd, one; 23rd, two; 25th, three; January 6th, 1897, four; 7th, one, the last case.

The following Table gives the proportion of cases without definite signs of Scarlet Fever when seen on admission, and the number of these that ultimately proved to be Scarlet Fever:—

Quarters.	Total Cases	Indefinite on Admission.	Proved Scarlet Fever.	Went out Safe.	Caught Scarlet Fever.	Died.
First ...	60	10	10*a*	...	...	...
Second ...	67	6	5	1	...	...
Third ...	94	19	13	3*b*	3*c*	...
Fourth ...	116	27*d*	15	10	2	...
Year ...	337	62	43	14	5	...

(*a*) One of these died of Pneumonia three hours after admission, so that a positive opinion was not possible.

(*b*) One of these was a severe case of Typhoid Fever, and was in the Hospital 41 days (most of the time in a separate ward).

(*c*) One of these was possibly a second attack.

(*d*) Six of these were quarantined, being admitted on suspicion.

As six cases in the Fourth Quarter were only admitted into Quarantine as suspects, there were only 331 cases actually sent in as Scarlet Fever, 13 of these proved not to be so, and 5 of these caught the Fever. Possibly these numbers should be 12 and 4, for in one case there seemed a strong probability that it was a second attack. Fortunately none of the five cases caught in the Hospital were fatal.

On the whole, the year has been free from mischance, but of course the number of cases treated has not been very great.

"*Return Cases.*"—339 cases went home from the Scarlet Fever Wards during the year; in only 9 of these did any fresh cases occur at their homes after their return.

(1) A case had been 65 days in the Hospital, delayed by Iritis; 37 days after return home another case occurred, this was certainly not due to the former case. (2) Case 45 days in, 48 days since commencement of illness; no complications before discharge, kept apart for 14 days after return home; said to have occasional running from the nose; fresh case occurred 17 days after the return home. As this case apparently occurred 3 days after contact with the former case it is probable that infection was from it, and if so was due to the nasal discharge. (3) Case 45 days in Hospital, 48 days since commencement of illness; no complications; 7 days after return home, other children absent until then, returned; 9 and 10 days after this two of these got Scarlet Fever. Infection seems probable here, but it is impossible to account for it. (4) Case 50 days in, 53 ill; had a slight sore in nostril six days before discharge; no nasal trouble since return, but some breaking out on face; fresh case 14 days after return, infection possibly from the rash on face. (5) Case 40 days in, 46 ill; no complications, fresh case 9 days after return home. (6) Case 43 days in, 44 ill, no nose or ear mischief, seemed perfectly clear when discharged; went home next day, and "same evening ears began discharging;" 8 days later a fresh case occurred. Due probably to the ear discharge. (7) Case 44 days in, 46 ill, no complications, fresh case 7 days after return. (8) Case 44 days in, 48 ill, no complications, quite clear when discharged, a few days later nose began discharging, fresh cases 6 and 11 days after return. Probably due to the nasal mischief. (9) Case 47 days in and ill, fresh case 4 days after return.

Four (2, 4, 6, 8) of the above were apparently due to complications coming on after the patients' return, and of which there were no signs when they were discharged. A longer detention would lessen the possibility of this, but it is difficult to know how long to detain a case apparently quite clear, as all the above were, to ensure against the occurrence of late infective complications; for instance, Case 4 above was apparently infective for nine weeks; it would be a serious matter to detain the 335 cases that had no such complications for such a time as a mere precaution against what so seldom occurred. Cases 3, 5, 7, and 9, may have been due to some partial failure in disinfection. Eight failures out of so many cases is but a small amount and hardly at all lessens the value of the Hospital Isolation, but it is a serious fact, and has been noticed by others also, that these return cases are almost always severe ones; we had ten such cases arising from our eight failures, and two of these were fatal.

Disinfection.—The Quarterly numbers of articles stoved were—1,676; 1,388; 2,246; 3,966—9,276 in the year. Rooms in 321 houses were disinfected with sulphur.

METEOROLOGY.

(See Table 3.)

First Quarter. —The temperature, for the season, was exceptionally mild. There were five nights moderate frosts in the fourth week; a few slight frosts in the next three weeks; eleven nights moderate frost in the eighth and ninth weeks, this fortnight being the only very cold period during the Quarter; there were sudden, rather sharp, frosts on the 15th and 19th of March.

The prevailing winds were North-West or South-West, during the second week the direction was mainly N.E., but there was very little wind; there were some S.E. winds at the close of February. As a rule the wind was moderate, but there were very high winds during the first week of March; the 15th and 16th were stormy; and there were gales during the last week.

The Rainfall was low, only 5·14 inches. As a rule it fell in showers too light to have any appreciable wetting or cleansing effect. The weekly rainfall only exceeded half-an-inch once before March (last week in January ·62 inches, the average for the other eight weeks was only ·15 inches). During the first and third weeks in March there was some heavy rain; the total for four weeks being 3·17 inches.

The humidity was 88.

The Barometer was usually very high, at times extraordinarily so, during the second week it averaged 30·683 inches, during the fifth, sixth, and seventh, 30·514, 30·455, and 30·332 respectively (the highest week in 1895 was 30·361). During the first week in March it was low, and the variations were extreme; it fell to 28·735 inches (March 4th) and the range for this week was 1·216 inches. (The above figures are all corrected to 32° and sea level).

Second Quarter.—The weather was exceptionally fine, and the temperature very high. There were three nights frost during the first week; the temperature dropped to about freezing point a few times during the third, fifth, sixth, and eighth weeks. The maximum and mean temperatures were very high during May and June; the highest temperature was 84°·5 on June 16th.

The prevailing winds were North-West; as a rule the amount of wind was small, and this intensified the heat.

The Rainfall was *very* low, only 3·03 inches. This is a most phenomenal record, and the absence of rain has been a matter of extreme gravity. There was almost no heavy rain; there was a hailstorm on May 20th; a thunderstorm on June 4th, and some thunder and rain on June 9th.

The humidity was 74, an excessive dryness.

The Barometer was moderately high and very steady.

Third Quarter.—The high temperature of June was maintained through July, it fell somewhat in August, and further in September. The highest temperature of the year was 84° 6 on July 20th.

The prevailing winds were West, veering to North-West and South-West; there was some North-East wind in the weeks ending August 15th and September 5th; South-East in the week ending September 12th. As a rule the amount of wind was very low, but the last week of the Quarter was stormy, and in the first and twelfth weeks there was rather high wind.

The Rainfall was 7·14 inches; an average amount. Until near the end of August, excepting some heavy thunderstorms on July 26th, there was little effective rain. From the close of August to the end of the Quarter there was heavier and fairly frequent rain; the eleventh and thirteenth weeks were very wet.

The Humidity was 79, July and August being very dry; September, damp.

The Barometer was at first rather high, but was very low in September, with considerable variations.

Fourth Quarter.—The temperature was moderate; the sixth week was very cold, there were occasional rather severe frosts, lasting two or three nights, during the Quarter, and the twelfth and thirteenth weeks were cold, but the general temperature was mild for the season. The general mildness was compensated for by the sudden and extreme changes, and dampness.

The winds were very variable in direction, general tendency from the North, with long spells of North-East; but it frequently blew from the West and South-West; and the highest winds were from these directions. The lowness of the wind during the colder weeks moderated the effects of the temperature.

The Rainfall was 7·56 inches; rather below an average amount. Rain was very frequent, but seldom heavy.

The Humidity was 89, excepting a few frosty days the atmosphere was very damp.

The Barometer, as a rule, was high, but the variations were very extreme, especially considering the small amount of high wind.

Explanatory Remarks on the Tables.

The Returns made by the Registrar for the East Sub-District include all deaths occurring in the General Hospital and Workhouse; many of these are from outside the Borough, a few are returned as "no home," the others are of persons from the East and West Sub-Districts. Throughout the Tables the few cases returned as "no homes" are included in the East figures; the deaths from outside the Borough are excluded altogether (except in the uncorrected figures in Table 8), and the deaths from the East and West are referred to their own Sub-Districts. Particulars of these deaths in the Hospital and Workhouse are given in Table 7. In Table 8, the comparison between the Sub-Districts in all years before 1884 is misleading, as the East deaths include many really belonging to the West; the second row of figures in each year since 1884 are the corrected returns, the first row (given to compare with former years) are the Returns as sent in by the Registrars.

Table 10 gives our comparison with the other 32 great towns. The third column in this Table does not give the actual death rates, but the rates corrected for the age distribution of the populations. The death-rate varies in the different age decades, for instance, is very high under 5 years and over 60 years; comparatively low between 20 years and 40 years. Thus a district whose population consisted of persons under 5 years and over 60, with a death-rate of 40, might be far healthier (as far as death-rate is an index of health) than a district whose population was between 20 and 40 years, with a death-rate of 10. In the third column in Table 10 the rates are what they would have been had the age distribution in each town been the same as in England and Wales, and are therefore a much more accurate comparison than the actual death-rates.

VITAL STATISTICS.

The year 1895 was one of very heavy fatality throughout England; the death-rate for the 33 towns was 22·33. This year it is down to 20·45. Wolverhampton, which more than shared the general fatality last year, has this year a greater proportionate reduction than the 33 towns, the rates being 25·51 for 1895, 20·88 for 1896. This year nine of the towns exceed our death-rate (see Table 10); our Zymotic rate stands high, only five towns exceeding us. This is principally due to our heavy rate from Diarrhœa (1·41), being first on the list, and nearly double the 33 towns. Diptheria also contributes, our rate (0·60), being only exceeded by West Ham, and equalled by London. We are also highest in Fever (which practically means Typhoid Fever), but the returns are generally low under this heading.

The comparison of our death-rate with those of past years is satisfactory. The variations in Diarrhœa are greater than in almost any other single disease (excepting rare epidemics of Measles, or uncontrolled Scarlet Fever) and so this disease affects the death-rate considerably; now in spite of the fact (see Table 9) that we have had a Diarrhœa fatality of 131, far above the average, yet our death-rate is the lowest for 24 years, excepting only that of 1885 (see Table 8), which is 0·2 lower, although there were only 50 deaths from Diarrhœa that year.

Moreover, our rates are calculated on a population estimated as increasing at the same rate as between 1881 and 1891; and, considering the great increase in the number of houses in the Borough during the last few years, during which many completely new streets have been built, there can be little doubt but that there must be a more rapid increase in our population, which would therefore exceed our estimate. This would, of course, reduce our rates. Our Zymotic death-rate, 3·5 (although an improvement on last year's 5·1) is high; this is, as has already been said, mainly due to Diarrhœa, and partly to Diphtheria and Typhoid Fever. The great factor in causing our low rate is the low return from Phthisis and Respiratory Disease, 450 (see Table 9), being 109 below the previous ten year's average.

The most obvious cause of the above is the weather, the heat in the summer causing the Diarrhœa, the mild winter acting in two ways—directly, by lessening the deaths from chest affection; indirectly, by allowing more regular work, and not causing the severe distress we have sometimes had. Probably too, improved trade has much to do with our lower death returns.

If these conclusions are correct, it is noteworthy that the improved returns are not due to public sanitation; but the high fatality due to Diarrhœa undoubtedly is in some degree due to unhealthy town conditions, although intensified by heat.

Comparison of the Sub-Districts confirms the above. Last year the deaths from Phthisis and Respiratory Diseases were—East, 326; West, 227; this year (see Table 5) they are 239 and 211; so that the drop from these deaths in the Borough is almost all in the East, where poverty is greatest and severe weather is always most felt. The deaths from Diarrhœal diseases last year were —East, 144; West, 111; this year (see Table 4) they are 133 and 66. It is not clear why there should be such a fall in the West, nor why the difference in the two Sub-Districts should be so great this year; it is much more than would be explained by the difference in child population.

The deaths referred to Diarrhœa merely are still more remarkable. Last year they were—East, 58; West, 77; this year they are 83 and 48. As already explained, these returns are too vague to be of any statistical value, but it is worth remarking that they explain the fact that the West Zymotic death-rate has dropped 2·0, against the East 1·0 (see Table 8).

Table 5 gives the detailed difference between the Sub-Districts. Birth-rate, 10·3 higher in the East; a poorer population, marrying early, and few domestics. Deaths—over 60 years, 26 more in the West; greater number reaching old age in the more prosperous district. Under 1 year, 59 more in the East, greater debility and less care in the poorer district, and more children. From 1—5 years, only 16 more in the East, element of care less marked after age of infant-rearing; Phthisis, 11 more in the East, greater feebleness and exposure.

It is worth while to compare these comments with those on page 37 of the 1895 Report.

SANITARY CONDITION.

The most obvious unhealthy condition in our town is the number of dwelling-houses which are insanitary from the want both of proper air space around them and proper opportunity for change of air through wind, and lack of sunlight. The excess of town deaths over country in England is not mainly due to Zymotic diseases (excepting Diarrhœa): these are now, on the whole, more controlled and less proportionately fatal in the towns than in the country. The excess in deaths, and the defective health, of which the deaths are only a partial index, are really due to lack of pure air, and, in certain conditions, to the effects of poverty. This is partially illustrated by our East and West Sub-Districts; if certain areas in the West, which are as bad as any in the East, could be classed in their statistics with the latter, the example would be much more striking. Putting aside the question of poverty for the present, and considering only the conditions of some of our dwellings and their surroundings, there are certainly very many houses in the town not really fit for habitation, inasmuch as those living in them have not the opportunities necessary for perfect health. Most of our old and poorer streets are themselves too narrow, and often have too little back spaces for ventilation and windage; and yet in nearly all of them these back spaces are filled with houses in courts or yards, so that the land has far too many people living on it, and these back houses not only have insufficient air themselves, but they check the flow of air about the other houses. When to this are added the facts that nearly all these back houses are old and poorly constructed, and often in bad repair, the courts or yards themselves often badly-paved and of irregular surface, allowing of stagnant foul water lying about; the property owners often too poor to do the most needful repairs; the receipts from the properties sometimes insufficient to pay for the alterations required; then it will be fully evident that nothing short of doing away with this class of house altogether would really satisfy the needs of sanitation. This must be ultimately done, but for the present it is, of course, impossible. We can only proceed gradually, dealing at first with those houses which are in the worst situations, or whose bad repair gives extra ground for closing them. This we are continually doing.

The result is not as beneficial as it might be; first, because in most instances the empty houses remain standing, obstructing ventilation, and affording facility for accumulating filth; and next, because it is always doubtful if the condition of the people turned out is bettered. In spite of the vast amount of new property built in the Borough, there is no additional accommodation for the very poor, for it does not pay to provide it. Until this problem is solved, the gravest sanitary defect of our and other large towns will remain. It should be added that numbers of our people have much to learn, and many bad habits to alter, before they can be trusted with proper homes, though it may be that bad habits and ignorance are largely due to bad and hopeless surroundings.

The next most important defect we have is, I believe, our old closet system ; this I have already freely commented on. Powers have been obtained for the substitution of water carriage for the pail-closets, and the change is being made, rather too slowly. There are several questions which need settling in reference to our sewering, notably the flushing and ventilation of the street sewers—matters rendered all the more urgent by our adoption of the separate system. There is a great improvement in the removal of ash-pit and other house refuse, but I don't think the ultimate disposal of it is yet satisfactory ; I am still of opinion its destruction by fire would be far the best way of dealing with it. The paving of so many of the streets with granite is a real sanitary improvement, lessening the amount of dust and dirt in our midst. For the rest, our defects are matters of detail, such as are dealt with by our Nuisance Inspection Department. The work of this department is given in the Annual Report of the Health Committee. In my Report for 1895, I mentioned that the staff was being re-organized ; this has been done, the staff is now fully equal to its work, and the work is planned out in a systematic and thoroughly efficient manner. The result has been a very great improvement in the amount of work done ; but it is still defective, largely on account of frequent changes in our staff, and illness.

Unwholesome Food.—Four carcases of beef, 6 sheep, 6 calves, 2 lambs, 6 pigs, 3 pig's heads, 36lbs. of pork, 207lbs. and 21 large pieces of beef, 83 rabbits, 1 basket of fish, 546 eggs, 452lbs. of cherries, and 1 bag of Brazil nuts were condemned, and destroyed as unfit for food,

Statistical Summary, 1896.

	East Sub-District.		West Sub-District.		Borough.	
Area—Acres	828		2,697		3,525	
Population*	39,263		47,462		86,530	
Density—No. of persons per acre	47·4		17·6		24·5	
Inhabited Houses					about 18,000	
Rateable Value—Total exclusive of Government Property					£331,985 10s. 0d.	
Marriages					No. 839	Rate 9·5
	No.	Rate	No.	Rate	No.	Rate.
Births	1,595	39·9	1,428	29·6	3,023	34·3
Deaths	899	22·5	841	17·4	1,740	19·7
Zymotic Deaths	166	4·1	146	3·0	312	3·5
Infantile Mortality Deaths under 1 year per 1000 births	194		175		185	

---

*Estimated to the middle of 1896, the Borough is not quite the sum of the Sub-Districts being estimated separately.

INDEX OF TABLES.

No. 1.—Cases of Measles, Scarlet Fever, Diphtheria, and Typhoid Fever recorded during the year 1896.

,, 2.—Weekly Returns under the Infectious Diseases Notification Act, and prevalence of some other Diseases.

,, 3.—Weekly Meteorological Returns and Death-rate.

,, 4.—Weekly Returns of Deaths in the Sub-Districts.

,, 5.—Quarterly Births and Deaths in the Sub-Districts and Borough.

,, 6.—Deaths in the Sub-Districts during the year 1896, classified according to Ages and Diseases.

,, 7.—Deaths during the year 1896, classified according to Diseases, Ages, and Localities, and the proportion of Deaths which occurred in Public Institutions.

,, 8.—Deaths and Death-rates and Populations of the Sub-Districts and Borough for the past 24 years.

,, 9.—Eleven years' Annual Returns of Deaths from various Diseases and at various Ages, and Death.rates and Births and Birth-rates in the Borough.

,, 9A.—Eleven years' Quarterly ditto.

,, 10.—Various Death-rates, &c., in the 33 great Towns during the year 1896. *(From the Registrar General's Annual Summary)*

(See also Explanatory Remarks on the Tables on pages 24 & 25.)

TABLE No. 1.

Cases of Infectious Diseases heard of in 1896.

		East Sub-District, Population 39,263.					West Sub-District, Population 47,462.					Borough, Population 86,530.					Totals.			Rate per 10,000 of Population.		
		1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Year.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Year.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Year.	East Sub-District	WestSub-District	Borough.	East Sub-District	WestSub-District	Borough.
Small Pox ...	Under 5 years ...	...	...	...	...	...	...	...	..	...	..	.	..	...	..	...	2	1	3	0·5	0·2	0·3
	5 years & upwards	2	...	...	.	2	..	1	..	...	1	2	1	...	...	3						
Measles ...	Under 5 years ...	49	15	11	9	84	51	6	3	3	63	100	21	14	12	147	193	116	309	49.1	24·4	35·7
	5 years & upwards	27	40	15	27	109	32	8	7	6	53	59	48	22	33	162						
Scarlet Fever	Under 5 years ..	10	3	13	24	50	11	8	19	24	62	21	11	32	48	112	155	217	372	39·4	45·7	42·9
	5 years & upwards	20	17	27	41	105	31	34	38	52	155	51	51	65	93	260						
Diphtheria ...	Under 5 years ...	10	18	11	6	45	22	20	15	14	71	32	38	26	20	116	114	246	360	29·0	51·8	41·6
	5 years & upwards	22	21	19	7	69	54	42	42	37	175	76	63	61	44	244						
Typhoid Fever	Under 5 years ...	2	2	3	...	7	4	2	...	...	6	6	4	3	...	13	89	49	138	22·6	10·3	15·9
	5 years & upwards	17	15	42	8	82	14	14	9	6	43	31	29	51	14	125						

TABLE No. 2.

WEEKLY RETURNS under the Infectious Diseases Notification Act, and prevalence of certain other diseases.

A few cases x. Prevalent xx- Very Prevalent xxx.

1896 Week ending	Small Pox	Scarlet Fever	Diphtheria	Typhoid Fever	Puerperal Fever	Measles	Whooping Cough	Pneumonia	Influenza
January 4th ..	...	11	7	5	...	xx	xx	xx	x
,, 11th...	. .	1	8	4	...	xx	xx	xx	x
,, 18th...	...	7	6	2	...	xx	xx	xx	x
,, 25th ..	...	11	8	3	...	xx	xx	x	...
February 1st ..	...	3	3	3	...	xx	x	x	x
,, 8th ..	1	5	11	1	...	xx	x	x	x
,, 15th...	...	8	13	...	...	xx	x	x	x
,, 22nd ..	...	5	7	3	...	xx	x	x	x
', 29th .	...	3	7	2	1	x	...	x	x
March 7th ..	..	3	11	8	...	x	...	x	x
,, 14th...	...	9	11	1	...	x	...	x	x
,, 21st...	1	2	7	2	...	x	...	x	x
,, 28th ..	...	4	9	3	...	x	x	x	x
April 4th ..	...	5	13	5	...	x	x	x	x
,, 11th ..	...	4	3	...	...	x	x	x	x
,, 18th ..	...	...	1	3	...	x	x	x	x
,, 25th ..	...	3	10	5	...	x	xx	x	...
May 2nd...	...	4	5	4	1	x	xx	x	x
,, 9th...	...	7	14	1	...	...	xx	x	x
,, 16th...	1	2	9	2	...	...	xx	x	xx
,, 23rd...	...	3	12	1	...	x	xx	x	xx
,, 30th ..	...	5	2	1	...	x	xx	x	x
June 6th	...	7	8	2	...	x	xx	x	...
,, 13th...	...	11	8	6	...	x	xx	x	...
,, 20th	...	9	5	5	...	x	x	x	...
,, 27th...	...	4	9	1	..	xx	x	x	...
July 4th...	...	11	11	2	...	xx	x	x	...
,, 11th ..	...	10	4	1	...	xx	x	x	...
,, 18th...	...	9	5	...	...	xx	xx	x	...
,, 25th ..	...	9	9	3	1	x	xx	x	...
August 1st ..	...	8	9	4	...	x	xx	x	...
,, 8th...	...	5	6	7	...	x	xx	x	...
,, 15th...	...	4	...	7	...	x	xx	x	..
,, 22nd...	...	5	8	7	...	x	xx	x	...
,, 29th .	...	3	7	3	...	x	x	x	...
September 5th...	...	9	7	4	...	x	x	x	...
,, 12th...	...	16	6	10	...	x	x	x	...
,, 19th ..	...	6	8	5	1	x	x	x	...
,, 26th ..	...	5	4	...	...	...	x	x	...
October 3rd ..	...	8	4	1	...	...	x	x	...
,, 10th ..	...	8	1	1	...	x	x	x	...
,, 17th...	...	9	6	...	...	x	x	x	...
,, 24th .	...	22	11	1	...	x	x	x	...
,, 31st ..	...	15	3	...	...	x	x	x	x
November 7th...	...	16	7	...	..	x	x	x	x
,, 14th...	...	12	1	2	...	x	x	x	x
,, 21st ..	...	9	4	2	1	...	x	xx	xx
,, 28th...	...	5	3	1	...	..	x	xx	xx
December 5th...	...	10	4	...	...	x	x	xx	xx
,, 12th...	...	13	3	4	...	x	x	xx	xx
,, 19th ..	...	10	5	1	...	x	x	xx	xx
,, 25th...	...	5	6	...	...	x	x	xx	xx
January 2nd...	...	3	5	1	...	...	x	xx	xx
YEAR ..	3	381	354	140	5				

Tables 1 and 2 do not tally; 1 including cases not reported by doctors, and 2 including cases which ultimately proved incorrect.

TABLE No. 3.

Weekly Meteorological Report, from observations taken at 9 a.m. daily.

Week ending	Barometer Reduced to 32° and Sea Level.		Humidity.	Temperature.					Rain.	Wind.		Death Rate per 1,000 per annum.
							Earth.					
	Mean	Range		Max.	Min.	Mean.	1ft.	4ft.		Prevailing Directions.	Total in Week	
1896	in.	in.	0-100	°	°	°	°	°	in.		mls.	
January 4th...	29·970	·584	96	53·1	28·9	43·6	42·5	44·5	·30	SW	1209	22·3
,, 11th...	30·683	·406	92	41·5	25·8	32·8	40·1	45·0	·04	NE	785	19·8
,, 18th ..	29·885	·939	83	51·6	29·5	41·0	40·0	44·5	·37	W, NW, W	1863	30·1
,, 25th ..	30·179	·618	93	50·2	23·1	35·5	38·7	44·2	·62	SW	936	15·6
February 1st...	30·514	·663	88	49·9	28·1	39·0	40·9	43·9	·10	SW, NW	887	150
,, 8th .	30·455	·595	93	54·9	26·0	38·9	39·8	43·8	·13	SW	1411	24·7
,, 15th .	30·332	·290	87	53·0	31·9	42·0	42·1	44·0	·05	SW, W	1240	15·0
,, 22nd...	30·077	·979	89	52·7	23·1	36·5	40·8	44·1	·40	SW	1235	20·5
,, 29th ..	30·222	·375	?	52·2	21·4	34·8	38·1	43·8	·16	SE, NW	1434	14·4
March 7th...	29·374	1·216	82	52·9	30·9	41·6	42·3	43·5	·96	NW	2306	20·5
,, 14th ..	29·972	·501	91	57·9	32·0	41·5	44·5	44·0	·57	NW	1436	18·0
,, 21st ..	29·733	·409	81	57·2	26·0	41·4	43·1	44·5	·95	SW	1645	18·6
,, 28th...	29·805	·523	82	63·7	30·9	43·8	45·8	44·9	·49	NW	1510	16·8
April 4th...	30·092	·375	78	52·2	24·9	38·2	43·8	45·4	·14	NW	1025	17·4
,, 11th...	30·173	·356	79	60·9	38·5	46·6	46·7	45·6	·46	NW	1479	19·8
,, 18th ..	30.073	·452	79	60·3	30·8	43·7	47·5	46·5	·54	NW	1205	19·8
,, 25th...	30·291	·407	80	64·3	33·3	47·2	50·7	47·0	·05	NW, SW	861	21·7
May 2nd...	29·977	·697	78	63·6	31·2	45·2	50·9	48·0	·08	W	1291	16·2
,, 9th ..	30·333	·204	72	65·4	29·3	46·8	51·5	48·5	...	NE	1161	19·2
,, 16th...	30·272	·297	62	78·2	36·6	54·3	56·7	49·5	...	NE, NW	884	15·0
,, 23rd...	30·045	·337	81	75·7	30·0	51·7	57·5	51·0	·40	NW	1285	15·6
,, 30th ..	30·310	·321	71	70·3	33·8	51·2	57·0	51·7	...	NE	1008	16·2
June 6th...	29·824	·415	64	77·1	40·2	58·4	60·9	52·4	·55	SW	764	19·2
,, 13th ..	29·729	·524	74	78·5	42·3	57·8	60·9	53·4	·33	NE, SW	960	13·8
,, 20th...	29·946	·552	67	84·5	46·1	61·7	64·4	54·4	·31	SW, W	1196	13·8
,, 27th ..	30·105	·193	76	78·6	42·6	56·5	61·2	55·3	·17	NW	741	16·8
July 4th...	29·997	·400	79	73·7	44·1	55·6	61·2	55·5	·44	NW	1344	16·8
,, 11th ..	30·005	·421	79	81·5	45·2	58·8	63·0	55·8	·22	NW, SW	885	23·5
,, 18th...	30·143	·261	65	83·0	43·7	59·2	64·3	56·4	...	N	884	18·6
,, 25th...	29·926	·462	70	84·6	45·0	60·0	64·2	56·9	·48	W	1131	30·7
August 1st ..	29·886	·490	74	71·0	40·0	56·2	61·2	57·1	·96	SW	910	28·9
,, 8th ..	30·043	·232	77	70·0	38·2	53·6	59·3	56·9	·13	NW	855	24·7
,, 15th .	30·098	·342	78	71·4	42·3	55·7	60·1	56·5	·07	NE, NW	1169	25·9
,, 22nd ..	29·970	·286	84	70·7	43·4	55·2	59·5	56·5	·50	NW	706	21·1
,, 29th ..	29·931	·513	78	70·7	35·5	53·2	59·4	56·5	·83	NW, W	1134	19·8
September 5th ..	29·806	·239	95	63·7	45·0	53·1	57·5	56·2	·80	SW, NE	934	21·1
,, 12th ..	29·776	·468	90	67·0	48·8	55·4	58·1	55·8	1·10	SE, S	987	12·6
,, 19th ..	29·667	·747	78	67·6	41·2	53·0	56·8	55·7	·40	SW	1388	15·6
,, 26th ..	29·610	·548	83	61·4	36·0	49·4	53·6	55·1	1·21	SW, NW	1739	12·0
October 3rd...	30·022	·817	88	65·0	38·3	49·0	53·1	54·3	·44	NW, SW	900	20·5
,, 10th...	29·536	·429	83	59·1	34·9	47·6	51·5	53·9	1·18	SW	1746	16·8
,, 17th ..	30·013	·573	92	55·4	25·9	40·8	48·0	52·9	·48	N, NE	1590	11·4
,, 24th...	29·483	·771	88	48·8	23·6	36·3	44·8	51·8	·24	N, SW	853	19·2
,, 31st ..	29·599	·592	91	50·6	21·7	35·2	42·3	50·3	·15	NW, SW, NE	759	22·9
November 7th ..	30·118	·776	?	47·0	17·0	33·4	39·8	49·0	·58	NE	634	24·7
,, 14th ..	30·023	·662	86	50·2	23·7	38·0	39·3	47·5	·35	NE. SW	1189	23·5
,, 21st...	29·930	1·049	89	58·3	24·7	38·5	39·8	46·8	·44	SW	781	25·3
,, 28th ..	30·378	·615	92	47·0	29·6	38·6	42·0	46·3	·03	SW, NE	1511	32·5
December 5th ..	29·698	1·441	92	47·3	18·1	35·4	39·0	45·9	1·31	NE, SE	1692	18·0
,, 12th...	29·464	1·088	92	49·1	30·1	39·6	41·2	45·2	1·14	NW, SW	1645	18·6
,, 19th ..	29·617	·541	?	42·0	21·4	31·3	38·2	45·2	...	NE	731	19·8
,, 26th ..	30·120	·202	?	52·2	22·3	32·8	35·9	44·2	·49	NE, NW	1107	22·9
January 2nd ..	30·129	603	89	50·0	25·7	33·5	39·8	43·5	·73	SW	1569	22·9

Total Rainfall in the year, 22·87 inches.

TABLE No. 4.—Weekly Returns of Deaths in the Sub-Districts.

	Week ending		January				February					March				April				May					June				July				August					September				October					November				December				Jan	1896
			4	11	18	25	1	8	15	22	29	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	4	11	18	25	1	8	15	22	29	5	12	19	26	3	10	17	24	31	7	14	21	28	5	12	19	26	2	Totals
EAST SUB-DISTRICT	MEASLES	Under 5 yrs.	..		3	..	..	..	..	..	..	..	1	..	..	..		..	..	..	..	..	..	..	..		..	..		..		..	..	..	1	..		..			..	..	..	..	..	..		..	..	..	..	..	..	..	..	5
		5 & upwds.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	SCARLET FEVER	Under 5 yrs.	..	1	1	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	..	..	..	8
		5 & upwds.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..			..	..	1	..	..		..	..	..	..	..	..	..	..	..		..	..	..	1
	WHOOPING COUGH	Under 5 yrs.	..	..		..	..	..	..			..	..		..		1		..	..	..	..	..	..	..	..	..	..	..	1	1		..	..	1	1	..	..				..	1	..		..	1	..	..	..	..	..	..	1	..	8
		5 & upwds.	..			..	..	..	..	..	..	..	..	..		..	..	..	..	..		..	..	..	..	..	..		..		..		..	..	..		..	..	..	..	..			..	..	..	..	..	..	..	..	..	..	..	..	..
	DIPHTHERIA	Under 5 yrs.	..	..		..	1	..	..	..	..	..	..	..	1	1	1			..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	2	..	..		1	1	..	..	..	1	1	..	..	..	..	2	..	..	..	..	..	14
		5 & upwds.	..	..	..	1	..	..	..	1	..	..	..	1	..	1	..	..	1	1	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..		..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	7
	TYPHOID FEVER	Under 5 yrs.	1	..	..	..	..	..	..		..	..		..	..			..	..		..	..	..	..	..	..		..	..		..	..	..	1	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
		5 & upwds.	1	1	1	..	..	..	..	1	..	1	..	..	..	..		1	..	1	..	..	..	..	..	2	..	..	..	..	..	..	1	1	..	1	1	2	1	1	1	1	..	..	..	..	..	..	..	3	..	..	..	..	..	22
	DIARRHŒAL DISEASES	Under 5 yrs.	..	1	..	..	..	1	1	4	..	2	1	1	1	1	1	..	..	..	..		..	..	2	1	2	1	3	6	6	14	11	8	12	10	5	2	2	4	1	2	..	1	..	3	1	1	..	3	1	..	..	..	1	117
		5 & upwds.	..	..	..	..	..	..	..	..	..		..	..	..	..	..	1	..	..	..	..	..	..	..	1		..	..	2	..	..	2	2	5	..	..	2		..	..	..	..	..	..	..	..	..		1	..	..		..	..	16
	PHTHISIS	Under 5 yrs.	..	..	..	..	..		..	..		..	..	..	..	..	..	..	..	..	..	..			..	..		..	..	..	..	..	..	..	..	..	..	1		..	..		..	..	..	1	..	..	..	..	..	..	..	..	..	2
		5 & upwds.	1	1	1	2	..	2	3	..	1	..	2	..	..	2	1	1	3	2	1	1	2	2	2	1	..	..	..	..	1	3	..	..	..	1	..	..			..	1	2	1	..	..	1	..	1	..	1	..	1	..	4	48
	RESPIRATORY DISEASES	Under 5 yrs.	4	2	2	1	3	1	1	3	2	3	2	1	2	..	2	3	3	2	1		1	1		..	..	1	1	..	..	2		..	..	1	..	..	1	2	..	2	..	1	2	2	3	2	6	6	1	1	1	2	2	79
		5 & upwds.	4	4	7	2	3	1	4	..	3	2	4	3	2	1	3	3	2	2	1	1	1	2		2	3	4	1	2	3	1	..	2	..	1	3	3	..		1	1	3	1	1	..	3	1	3	7	..	2	2	4	1	110
	ALL CAUSES	Under 5 yrs.	8	6	9	4	6	7	9	14	4	11	5	4	6	3	14	10	10	5	4	4	5	5	4	6	3	5	7	13	13	19	12	11	17	15	8	7	7	8	3	10	5	4	9	10	8	11	9	13	8	11	7	6	6	428
		60 & upwds.	7	2	5	3	4	5	4	1	3	3	3	5	1	2	5	4	4	2	6	4	3	1	7	3	4	4	3	5	3	2	4	6	6	1	5	2	..	..		4	5	4	4	2	4	3	4	9	3	3	3	1	7	188
		All Ages	22	15	24	14	13	20	19	17	13	19	14	13	10	11	25	20	20	13	12	12	13	12	15	17	13	12	14	22	21	26	22	26	28	21	20	18	9	9	10	20	17	10	17	13	18	18	19	33	15	17	16	14	19	899
WEST SUB-DISTRICT	MEASLES	Under 5 yrs.	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..		..	..	..	..		..	..	..	..	1	..	..	..	..	3
		5 & upwds.		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	SCARLET FEVER	Under 5 yrs.	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	1	..	1	1	..	..	..	..	..	..	..	8
		5 & upwds.	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..		..	..	..	..		..	..	1	..	..	..	..	..	4
	WHOOPING COUGH	Under 5 yrs.	..	1	..	..	..	..		..	..	..	..	..	1	1	1	..	2	1	1	..	..	1	3	..	1	..	2	..	..	1	..		..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	19
		5 & upwds.	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..		..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	1
	DIPHTHERIA	Under 5 yrs.	1	1	2	..	..	..	1	1		1	1	..	..	..	..	..	1	..		1		1	1	..		..	..	..	..	..	..		..	2	..	1	..	..	1	..	..		..	1	1	..	..	..	1	..	1	2	..	22
		5 & upwds.	..	1	..	1	..	1	1	1	..		..	..	1	..	..	1	..	..	..	1	1	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		1	..	..	..	..	..	12
	TYPHOID FEVER	Under 5 yrs.	1	..		..	..	..	..	..	..		..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..		..		..	..	..	..	..	..	..	..	..	..	..	..	..	2
		5 & upwds.	1	..	..	..	1	..	..	..	..	1	1	1	..	1	1	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..		..	..	..	1	..	..	..	..	..	..	11
	DIARRHŒAL DISEASES	Under 5 yrs.	1	2	..	1	..	..	..	..	..	..	..	2	..	1	..	..	1	..	3	..		..	..	..	2	2	2	4	5	5	5	4	2	5	2	1	1	2	2	1	1	..	..	1	..	..	..	..	..	..	1	..	1	60
		5 & upwds.	..	..	..	1	..	..	..	..	..	..		..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..		..	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
	PHTHISIS	Under 5 yrs.	..	..	..	..	..			..	..		..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..		..	..		..	..	..	..	1	..	..	..	..	..	1
		5 & upwds.	..	2	2	1	..	..	..	..	1	..	..	1	1	2	..	1	..	..	..	1	3	1	1	1	1		1	1	1	1	..	2	..	..	..	..	1	4	..	1	1	..		2	..	..	1	..		..	1	2	..	38
	RESPIRATORY DISEASES	Under 5 yrs.	1	2	3	..		2	..	..	1	2	1	..	..	3	..	3	1	3	2	1	..	1	..	1	1	..	..	1	..	2	2	1	1	..	1	..	2	..	..	..		2	3	5	4	7	2	3	3	3	2	2	2	76
		5 & upwds.	2	3	3	..	1	5	..	2	1	3	3	4	2	1	..	1	4	1	5	2	3	2	2	1	..	2	1	1	..	1	2	1	2	2	2	..	..		..	..	..	..	1	5	4	3	7	..	2	2	2	3	2	96
	ALL CAUSES	Under 5 yrs.	8	8	11	3	5	7	3	5	2	6	6	7	5	7	5	7	7	5	6	6	1	5	6	2	6	7	10	9	6	11	13	8	5	9	6	8	7	4	4	7	5	5	6	9	10	10	3	15	8	8	6	9	6	353
		60 & upwds.	4	3	6	3	4	6	2	4	6	1	6	5	5	2	2	2	5	5	7	3	5	5	3	..	1	5	..	2	2	5	3	3	4	3	5	4	1	5	2	2	5	2	4	7	7	6	12	3	2	4	5	9	7	214
		All Ages.	15	18	26	12	12	21	6	17	11	15	16	18	18	18	8	13	16	14	20	13	13	15	17	6	10	16	14	17	10	25	26	15	15	14	14	17	12	17	10	14	11	9	15	25	23	21	23	21	15	14	17	24	19	841

TABLE No. 5.—Quarterly Births and Deaths during 1896.

	Quarters.	East Sub-District, 39,263					West Sub-District, 47,462.					Borough, 86,530.				
		1st	2nd	3rd	4th	Year.	1st	2nd	3rd	4th	Year.	1st	2nd	3rd	4th	Year.
BIRTHS.	Males	203	200	192	229	824	186	171	188	196	741	389	371	380	425	1565
	Females	181	203	183	204	771	153	155	166	213	687	334	358	349	417	1458
	Total	384	403	375	433	1595	339	326	354	409	1428	723	729	729	842	3023
	Rate	39·2	41·1	38·3	41·1	39·9	28·6	27·4	29·9	32·1	29·6	33·5	33·8	33·8	36·2	343
DEATHS.	Males	102	107	133	125	467	109	98	97	122	426	211	205	230	247	893
	Females	111	88	112	121	432	96	81	109	129	415	207	169	221	250	847
	Total	213	195	245	246	899	205	179	206	251	841	418	374	451	497	1740
	Rate	21·7	19·9	25·0	23·3	22·5	17·3	15·1	17·4	19·7	17·4	19·3	17·3	20.9	21·4	19·7
	60 years and upwards...	46	49	37	56	188	55	45	39	75	214	101	94	76	131	402
	Under 1 year	58	57	107	88	310	49	45	81	76	251	107	102	188	164	561
	1—5 years	35	21	33	29	118	27	25	19	31	102	62	46	52	60	220
	Zymotics	27	20	88	31	166	33	33	53	27	146	60	53	141	58	312
	Rate	2·7	2·0	8·9	2·9	4·1	2·7	2·7	4·4	2·1	3·0	2·7	2·4	6·5	2·4	3·5
	Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Measles	4	...	1	...	5	2	...	...	1	3	6	...	1	1	8
	Scarlet Fever	4	...	2	3	9	2	1	5	4	12	6	1	7	7	21
	Whooping Cough ...	...	1	4	3	8	2	12	4	2	20	2	13	8	5	28
	Diphtheria	5	7	4	5	21	14	8	5	7	·34	19	15	9	12	55
	Typhoid Fever... ...	6	4	10	4	24	6	5	1	1	13	12	9	11	5	37
	Influenza	2	4	...	5	11	1	1	1	7	10	3	5	1	12	21
	Diarrhœa	6	2	67	8	83	4	5	34	5	48	10	7	101	13	131
	Phthisis	13	18	6	13	50	8	11	11	9	39	21	29	17	22	89
	Respiratory Diseases ...	66	39	24	60	189	41	40	22	69	172	107	79	46	129	361
	Uncertified	1	2	1	3	7	4	1	7	3	15	5	8	8	6	22
	Inquests	17	13	8	15	53	5	6	8	11	30	22	19	16	26	83
Deaths in Public Institutions in the East Sub-District.	Hospital											36	34	41	36	147
	Workhouse											45	42	31	45	163
	From Outside the Borough											30	26	32	33	121
	From the West Sub-District											21	20	12	15	68
	No Home											6	5	5	4	20

TABLE No. 6.

DEATHS in the Sub-Districts during the year 1896, classified according to Ages and Diseases.

	EAST SUB-DISTRICT.							WEST SUB-DISTRICT.						
	AGES							AGES						
	0 to 1	1 to 5	5 to 25	25 to 60	60 to 75	75 and upwards	TOTALS	0 to 1	1 to 5	5 to 25	25 to 60	60 to 75	75 and upwards	TOTALS
I —ZYMOTIC DISEASES	66	50	21	18	8	3	166	52	51	27	13	3	.	146
III.—DIETIC DISEASES	..	.		...		..	...		...	...	1	...	..	1
IV.—CONSTITUTIONAL DISEASES	36	8	16	59	14	..	133	24	5	7	59	15	2	112
V.—DEVELOPMENTAL DISEASES	30	..		...	19	28	77	22		..	..	7	42	71
VI.—LOCAL DISEASES	133	48	29	130	95	17	452	108	44	33	123	108	28	444
VII — VIOLENCE	1	7	7	3	...	1	19	..	..	1	8	3	...	12
VIII.—ILL-DEFINED CAUSES	44	5	.	..	3	...	52	45	2	...	2	2	4	55
TOTALS	310	118	73	210	139	49	899	251	102	68	206	138	76	841
I—Zymotic Diseases														
1—MIASMATIC.														
Measles		5	.	...	...	...	5	..	3	..	..	...	...	3
Scarlet Fever	1	7	1	.	...	...	9	1	7	3	1	...	...	12
Whooping Cough	4	4	...	.	...	...	8	7	12	1	..	.	...	20
Diphtheria	.	14	7		...	..	21	1	21	12	...	...	..	34
Typhoid Fever		2	12	10	...	...	24	..	2	8	3		.	13
Influenza	...	1	..	5	3	2	11	..	1	2	5	2	...	10
2—DIARRHŒAL.														
Diarrhœa	58	17	.	2	5	1	83	43	4	...	1	...	..	48
5—VENEREAL.														
Syphilis	3	...	..	1	.	...	4	...	...	..	1	..	..	1
6—SEPTIC.														
Erysipelas	..	..	1	...	...	..	1	...	1	1	..	..	...	2
Pyæmia	..	...	..	..	..		..	...	...	..	..	1	..	1
Puerperal Fever	...	...	...	...	.	...	...	..	...	...	2	..	...	2
III—Dietic Diseases.														
Chronic Alcoholism	...	...	...	...	...	...	...	...	..	..	1	...	...	1
IV—Constitutional Diseases.														
Rheumatic Fever	...	...	2	1	..	..	3	...	..	2	1	..	..	3
Rheumatism	...	..	...	1	...	..	1	.	..	..	4	1	...	5
Gout	...	.	..	..	1	...	1	.	..	..	...	..	1	1
Rickets	...	1	...	...	..	..	1	..		...	...	...	...	..
Malignant Disease	...	..	...	16	12	...	28	..	.	..	13	11	1	25
Tabes Mesenterica	7	2	1	..	...	..	10	1	1	1	..	...	..	3
Tubercular Meningitis	1	1	1	..	...	...	3	1	...	...	..	..	...	1
Phthisis	2	...	10	37	1	.	50	..	1	2	35	1	...	39
Other Tuberculoses	2	2	2	3	..	...	9	..	1	1	3	...	...	5
Purpura	1	...	...	...	...	...	1	.	...	1	1	..	..	2
Anæmia	...	..	...	...	..	...	...	...	..	..	1	..	...	1
Diabetes	...	...	...	1	..	...	1	..	...	...	1	2	...	3
Others	23	2	...	...	...	...	25	22	2	..	...	...	...	24

TABLE No. 6—Continued.

	EAST SUB-DISTRICT.							WEST SUB-DISTRICT.						
	AGES							AGES						
	0 to 1	1 to 5	5 to 25	25 to 60	60 to 75	75 and upwards	TOTALS	0 to 1	1 to 5	5 to 25	25 to 60	60 to 75	75 and upwards	TOTALS
V—Developmental Diseases.														
Premature Birth	24	..	.	...	..	...	24	20	...	.	..	...	...	20
Atelectasis	5	...	...	...	...	...	5	...	...	...	...	.	...	...
Congenital Malformations ...	1	..	..	..	...	...	1	2	...	...	...	...	...	2
Old Age	...	..	.	...	19	28	47	..	...	...	...	7	42	49
VI—Local Diseases.														
1—NERVOUS SYSTEM.														
Meningitis	7	6	4	4	...	..	21	4	7	2	4	2		19
Apoplexy		..	.	8	15	3	26	...	...	1	13	15	2	31
Epilepsy		...	3	1	...	...	4	...	...	1	1	.	...	2
Convulsions	28	2	..	.	..	...	30	25	6	1	..	1	..	33
Disease of Spinal Cord ..	..	.	...	3	...	...	3	...	...	1	2	.	1	4
Others	...	..	1	4	3	.	8	-	...	1	3	14	2	20
2—ORGANS OF SPECIAL SENSE.														
Otitis media	1	.	...	..	..	..	1	...	...	...	...	.	...	..
3 -CIRCULATORY SYSTEM														
Pericarditis	..	...	...	...	..	...	...	...	...	1	1	..		2
Diseases of Heart...	.	...	6	27	19	4	56	...	...	6	29	33	4	72
Aneurism	.	.	...	.	.	...	...	...	...	..	1	..	...	1
Others			...	...	..	..	...	...	...	..	...	1	...	1
4 -RESPIRATORY SYSTEM.														
Croup, Laryngitis	2	5	1			..	8	2	3	1	...	...	...	6
Emphysema Asthma .. .	...	..	...	1	3	...	4	...	..	.	1	1	1	3
Bronchitis	22	8	1	18	27	5	81	31	8	2	17	25	14	97
Pneumonia	23	19	7	32	10	1	92	15	16	4	20	5	...	60
Pleurisy		...	1	1	1	..	3	...	.	...	...	..	.	...
Others		...	...	..	1	...	1	1	...	1	1	2	1	6
5—DIGESTIVE SYSTEM,														
Dentition	4	1	...	.	..	..	5	11	4	...	...	..	..	15
Sore Throat	1	...	..	..		...	1	...	...	..	...	..	...	...
Diseases of Stomach	6	1	2	2	1	1	13	..		1	3	1	...	5
Enteritis	32	3	..	5	3	1	44	13	...	2	1		1	17
Obstructive Diseases of Intestine	3	...	1	4	5		13	1	...	1	2	3	...	7
Peritonitis	...	...	1	...	...	...	1	...	...	2	3	.	...	5
Cirrhosis of Liver . ..	..	...	..	5	...	...	5	...	...	...	4	...	...	4
Other Diseases of Liver ...	2	...	...	1	1	1	5	..	..	...	..	2	1	3
Others	2	1	...	.	.	...	3	2	...	...	1	1	...	4

TABLE No. 6—Continued.

	EAST SUB-DISTRICT.							WEST SUB-DISTRICT.						
	AGES						TOTALS	AGES						TOTALS
	0 to 1	1 to 5	5 to 25	25 to 60	60 to 75	75 and upwards		0 to 1	1 to 5	5 to 25	25 to 60	60 to 75	75 and upwards	
6—LYMPHATIC SYSTEM, (*e.g.*, of Lymphatics and of Spleen)	...	...	...	1	...	...	1	...	..	.	.	..	...	...
8—URINARY SYSTEM.														
Nephritis	..	1	1	6	3	..	11	...	...	3	9	1	1	14
Bladder or Prostate	..	..	..	..	1	1	2	..	...	..	..	1	..	1
Others	..	...	...	1	1	..	2	..	...	..	...	...	...	...
9—REPRODUCTIVE SYSTEM.														
B—*Parturition.*														
Abortion	..	...	...	...	...	.	...	..		...	1	..	...	1
Puerperal Convulsions	...	..	..	...	...	...	.		..	.	1	..	..	1
Flooding	.	..	...	1	.	.	1	.	...	.	2	..	...	2
Others	..	...	...	1	...		1	.		...	3	.	.	3
10 BONES AND JOINTS.														
Caries, Necrosis	...	1	...	2	...	..	3	1	...	1		...	..	2
Arthritis	.	...	..	1	..	..	1	.		...	...	...	...	...
Others	...	..	...	1	...	...	1	...	.	...	...		..	...
11—INTEGUMENTARY SYSTEM.														
Carbuncle	.	..		..	..	..	...	..	..	1		..	...	1
Others	...	..	..	..	1		1	2	..	.		..	...	2
VII—Violence.														
1—ACCIDENT OR NEGLIGENCE.														
Fractures and Contusions ..	1	..	2	1	...	1	5		...	...	2	1		3
Gunshot Wounds	..	..	1	..	..	...	1	.		..	..	...	.	...
Burn, Scald	.	4	1	1	...	...	6	...	...	1	1	..	...	2
Poison		1	...	..		..	1	..	..		1	.	...	1
Drowning	..	2	2	...	..	..	4	...	...	.	1	..	..	1
3—SUICIDE.														
Cut, Stab	..			..	..	...	...	..	..	...	2		..	2
Poison	...	...	...	...	...	...	...	.	.	...	.	1	..	1
Drowning	..	..	1	1	..	...	2		..	...	..	1	..	1
Hanging	..	.	..	...	..	...	...	..	..	...	1	..	..	1
VII—Ill-Defined Causes.														
Debility, Atrophy, Inanition ..	44	2	..	..	..	...	46	45	2	.	...	..	..	47
Mortification	...	..	...	..	...	.	...	...	..	...	1	..	2	3
Tumour	..	1	..	..	.	..	1	...	...	...	...	..	..	...
Abscess	.	...	...	..	..	..	...	..	..	...		1	...	1
Hæmorrhage	...	..	...	...	..	..	...	.	..	..	1	...	1	2
Causes not Specified	..	2	...	..	3	...	5	...	...	...	.	1	1	2

TABLE No. 7.

TABLE OF DEATHS during the Year 1896 in the Urban Sanitary District of WOLVERHAMPTON; classified according to DISEASES, AGES, AND LOCALITIES, *and the proportion of Deaths which occurred in Public Institutions.*

		MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.								MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.														
										2	3	6	9	11	12	13	14	15	16	17	18	20	21	22
		At all Ages.	Under 1 year.	1 and under 5	5 and under 15	14 and under 25	25 and under 60	60 and upwards		Scarlatina.	Diphtheria	Fevers Enteric or Typhoid	Puerperal	Erysipelas	Measles	Whooping Cough	Diarrhœa and Dysentery	Rheumatic Fever	Phthisis	Bronchitis, Pneumonia, & Pleurisy	Heart Disease	Injuries	All other Diseases	TOTAL
	(a)	(b)	(c)	(d)	e	(f)	(g)	(h)	(i)															
	East Sub-District	899	310	118	38	35	210	188	Under 5 yrs	8	14	2	...	...	5	8	75	...	2	72	...	8	234	428
									5 & upwards	1	7	22	...	1	...	...	8	3	48	104	56	11	210	471
	West Sub-District	841	251	102	42	26	206	214	Under 5 yrs	8	22	2	...	1	3	19	47	...	1	70	...	...	180	353
									5 & upwards	4	12	11	2	1	...	1	1	3	38	87	72	12	244	488
	TOTAL IN BOROUGH	1740	561	220	80	61	416	402	Under 5 yrs	16	36	4	...	1	8	27	122	...	3	142	...	8	414	781
									5 & upwards	5	19	33	2	2	...	1	9	6	86	191	128	23	454	959
Deaths in Institutions in the East Sub-District.	General Hospital	147	6	22	22	27	60	10	Under 5 yrs	...	8	1	...	1	...	...	1	...	...	...	...	10	7	28
									5 & upwards	1	4	21	...	...	...	...	...	2	3	11	12	27	38	119
	Workhouse	163	11	8	...	7	52	85	Under 5 yrs	...	...	...	...	...	...	1	...	...	...	2	...	...	16	19
									5 & upwards	...	...	...	...	...	...	...	1	...	10	32	11	1	89	144
	From outside the Borough	121	5	12	9	18	46	31	Under 5 yrs	...	3	...	. .	1	...	1	...	...	...	1	...	5	6	17
									5 & upwards	1	1	8	...	...	...	...	...	1	5	16	6	18	48	104
	From West Sub-District	68	2	6	6	6	24	24	Under 5 yrs	...	3	1	...	...	...	...	...	...	...	...	...	...	4	8
									5 & upwards	...	1	6	...	...	...	...	...	1	1	7	10	4	30	60

TABLE No. 8.

Deaths and Death Rates for the past Twenty-four years.

Year.	East Sub-District.				West Sub-District.				Borough.				Estimated Populations.		
	Total.	Rate.	Zymotic.	Rate.	Total.	Rate.	Zymotic.	Rate.	Total.	Rate.	Zymotic.	Rate.	East.	West.	Borough.
1873	1,125	29·7	...	.	631	19·8	..	...	1,756	25·1	.	...	38,010	31,841	69,906
1874	1,048	27·6	...	...	627	19·3	...	...	1,675	23·6	...	...	38,087	32,487	70,636
1875	1,155	30·3	...	..	640	19·3	...	...	1,795	25·2	...	...	38,163	33,140	71,373
*1876	1,099	28·2	...	...	655	19·0	...	...	1.754	23·9	...	...	38,241	33,806	72,118
1877	1,157	30 2	...	..	611	17·7		...	1,768	24·3	...	...	38,318	34,485	72,871
1878	1,081	28·2	...	...	644	18·3	...	..	1,725	23·5	.	..	38,396	35,178	73,632
1879	1,093	28·5	...	...	608	17·0	...	.	1,701	22·9	...	...	38,474	35,884	74,402
1880	960	24·9	..	...	629	17·2	..		1,589	21·2	...	...	38,552	36,606	75,178
*1881	998	25·4		...	650	17·1	..	..	1,648	21·3	.	.	38,620	37,305	75,932
1882	1.056	27·4	...	...	657	17·3	.	...	1,713	22·4	..	...	38,663	37.909	76,596
1883	1.042	27·0	...		601	15·6	...		1,643	21·3	..	...	38,706	38,522	77,266
1884	1.158 981	29·9 25 4	222	5·7	699 753	17·9 19·3	115	2·9	1,857 1,734	23·9 22·3	337	4·3	38,748	39,146	77,942
*1885	1,012 844	25·6 21·4	102	2·5	658 720	16·2 17 8	74	1·8	1,670 1.564	20 9 19·5	176	2·2	38,791	39,779	78,624
1886	1,125 955	29·0 24·6	182	4·7	697 746	17·3 18·5	156	3·8	1,822 1,701	23·0 21·5	338	4·2	38,834	40,423	79.311
1887	1.133 944	29·2 24·3	122	3·1	659 720	16 1 17·5	102	2·4	1,792 1,664	22·4 20·8	224	2·8	38,876	41,077	80,005
1888	1.005 827	25·8 21·3	95	2·4	707 768	17·0 18·5	121	2·9	1,712 1,595	21·2 19·8	216	2·6	38,919	41,741	80,705
1889	1,065 883	27·4 22·7	104	2·6	674 737	15·9 17·4	102	2·4	1,739 1,620	21·4 19·9	206	2·5	38,962	42,417	81.411
*1890	1,183 977	29 8 24·6	98	2·4	725 795	16·5 18·1	80	1·8	1.908 1,772	22·8 21·2	178	2·1	39,005	43,103	82,124
1891	1,214 1,026	31·1 26·3	120	3·0	822 888	18·8 20·3	122	2·7	2.036 1,914	24 6 23·1	242	2·9	39,048	43,800	82,842
1892	1.117 935	28·6 24·0	125	3·2	724 781	16·3 17·6	95	2·1	1,841 1,716	22 1 20 6	220	2·6	39,091	44,509	83,567
1893	1,260 1,040	32·3 26·6	153	3·9	730 813	16·1 18 0	129	2·8	1,990 1,853	23·6 22 0	282	3·3	39,134	45,229	84,298
1894	1.175 975	30·0 24·9	193	4·9	668 744	14·5 16·2	121	2·6	1,843 1,719	21·7 20·2	314	3·7	39,177	45,961	85,036
1895	1,335 1,106	34·1 28·2	202	5·1	872 963	18·7 20·6	235	5·0	2,207 2,069	25 8 24·2	437	5·1	39,220	46,706	85.781
*1896	1,088 899	27·2 2·25	160	4·1	773 841	16·0 17·4	146	3·0	1,861 1,740	21·1 19·7	312	3·5	39,263	47,462	86,530

* These years contain 53 weeks.

For explanation, see remarks at end of the text.

TABLE No. 9.—Eleven Years' Annual Deaths, &c.

	1886	1887	1888	1889	*1890	1891	1892	1893	1894	1895	*1896	A
Small Pox	—	—	—	—	—	—	—	1	5	—	—	0·6
Measles	111	31	39	40	32	25	41	21	73	40	8	45·3
Scarlet Fever	5	16	17	6	13	14	3	25	55	34	21	18·8
Whooping Cough	22	29	58	48	27	26	80	4	28	53	28	37·5
Diphtheria...	10	7	10	7	4	5	4	5	33	84	55	16·9
Typhoid Fever	9	14	11	9	9	15	16	23	17	18	37	14·1
Diarrhœa	149	105	60	84	68	105	55	161	62	135	131	98·4
Phthisis and Respiratory... ...	486	512	560	485	673	668	582	560	520	553	450	559·9
60 years and upwards	367	419	406	406	452	491	400	445	389	468	402	424·3
Under 1 year	490	469	445	479	477	531	482	600	484	659	561	511·6
1—5 years...	545	272	237	299	250	287	275	212	310	353	220	284·0
Under 1 year, per 1,000 births ...	174	175	166	179	174	188	171	206	167	217	185	181·7
Total Deaths	1701	1664	1595	1620	1772	1914	1716	1853	1719	2069	1740	1762·3
Rate per 1,000	21·5	20·8	19·8	19·9	21·2	23·1	20·6	22·0	20·2	24·2	19·7	21·33
Zymotics	338	224	216	206	178	242	220	282	314	437	312	265·7
Rate per 1,000	4·2	2·8	2·6	2·5	2·1	2·9	2·6	3·3	3·7	5·1	3·5	3·18
Births	2803	2675	2674	2666	2735	2820	2805	2902	2889	3027	3023	2799·6
Rate per 1,000	35·4	33·5	33·2	32·8	32·8	34·1	33·6	34·5	34·0	35·4	34·3	33·93

* These years contain 53 weeks. A—Annual averages for the ten years preceding 1896.

TABLE No. 9a.—Eleven Years' Quarterly Deaths.

	1886				1887				1888				1889			
Quarters ending	3/4	3/7	2/10	1/1	2/4	2/7	30/9	31/12	31/3	30/6	29/9	29/12	30/3	29/6	28/9	28/12
Small Pox ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles ...	—	—	8	103	19	4	7	1	9	6	5	19	10	11	11	8
Scarlet Fever ..	1	3	1	—	2	1	5	8	8	4	4	1	2	—	1	3
Whooping Cgh.	2	8	6	6	6	1	7	15	20	14	11	4	4	14	6	24
Diphtheria......	6	3	—	1	—	3	1	3	4	4	1	1	—	2	2	3
Typhoid Fever.	3	1	1	4	1	2	5	6	2	5	2	2	1	2	4	2
Diarrhœa ...	6	10	98	35	6	4	90	5	4	7	30	19	3	8	56	17
Phthisis and Respiratory	159	103	77	147	170	120	75	147	184	137	95	144	165	116	76	128
60 yrs. & upwd.	127	83	64	93	134	130	66	89	127	98	80	101	130	84	87	105
Under 1 year...	106	95	148	141	98	95	172	104	118	103	113	111	103	109	138	129
1—5 years ...	56	51	73	165	84	40	63	85	73	64	37	64	67	71	74	87
Total Deaths...	446	342	382	581	447	394	417	406	478	395	335	387	433	378	386	423
Rate per 1,000	22·5	17·3	19·3	26·8	22·4	19·7	20·9	20·3	23·7	19·6	16·6	19·2	21·3	18·6	19·0	20·8
Zymotics ...	27	32	121	158	39	20	122	43	61	45	56	54	22	42	82	60
Rate per 1,000	1·3	1·6	6·1	7·9	1·9	1·0	6·1	2·1	3·0	2·2	2·7	2·6	1·0	2·0	4·0	2·9
Estimated Population	79,311				80,005				80,705				81,411			

	1890				1891				1892				1893			
Quarters ending	29/3	28/6	27/9	*3/1/91	4/4	4/7	3/10	2/1	2/4	2/7	1/10	31/12	1/4	1/7	30/9	30/12
Small Pox ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Measles ...	3	10	5	14	5	—	—	20	21	16	3	1	6	—	5	10
Scarlet Fever ..	4	2	3	4	2	2	2	8	1	—	—	2	1	1	6	17
Whooping Cgh.	17	8	—	2	—	—	5	21	47	27	3	3	1	—	1	2
Diphtheria......	3	—	—	1	1	2	1	1	—	3	1	—	—	1	1	3
Typhoid Fever.	2	3	1	3	5	2	5	3	1	7	5	3	3	4	9	7
Diarrhœa ...	7	3	42	16	5	7	66	27	7	4	31	13	3	11	140	7
Phthisis and Respiratory	248	139	109	177	177	204	84	203	241	129	84	128	156	136	98	170
60 yrs. & upwd.	144	91	80	137	137	168	79	107	143	93	69	95	100	118	91	136
Under 1 year...	116	79	147	135	93	120	159	159	143	107	120	112	127	99	232	142
1—5 years ...	83	57	43	67	47	54	49	136	123	81	40	31	24	34	71	83
Total Deaths...	545	365	392	470	417	536	400	561	587	415	340	374	403	389	535	526
Rate per 1,000	26·6	17·8	19·1	21·3	20·2	25·9	19·3	27·1	28·1	19·9	16·3	17·9	19·1	18·5	25·4	25·0
Zymotics ...	44	30	58	46	24	41	88	89	92	59	45	24	19	22	169	72
Rate per 1,000	2·1	1·4	2·8	2·0	1·1	1·9	4·2	4·3	4·4	2·8	2·1	1·1	0·9	1·0	8·0	3·4
Estimated Population	82,124				82,842				83,567				84,298			

	1894				1895				1896			
Quarters ending	31/3	30/6	29/9	29/12	30/3	29/6	28/9	28/12	28/3	27/6	26/9	*2/1
Small Pox ...	—	3	2	—	—	—	—	—	—	—	—	—
Measles ...	46	27	—	—	—	—	7	33	6	—	1	1
Scarlet Fever ..	7	19	19	10	17	2	8	7	6	1	7	7
Whooping Cgh.	5	10	11	2	8	12	14	19	2	13	8	5
Diphtheria......	5	8	10	10	19	24	14	27	19	15	9	12
Typhoid Fever.	—	2	6	9	3	—	5	10	12	9	11	5
Diarrhœa ...	4	1	44	13	2	1	113	19	10	7	101	13
Phthisis and Respiratory	154	143	91	132	211	138	89	115	128	108	63	151
60 yrs. & upwd.	102	114	82	91	194	111	83	80	101	94	76	131
Under 1 year...	115	115	129	125	138	113	260	148	107	102	188	164
1—5 years ...	96	91	68	55	79	65	89	120	62	46	52	60
Total Deaths...	460	473	394	392	599	489	556	475	418	374	451	497
Rate per 1,000	21·7	22·3	18·5	18·5	28·0	20·5	26·0	22·2	19·3	17·3	20·9	21·4
Zymotics ...	81	86	98	49	79	69	174	115	60	53	141	58
Rate per 1,000	3·8	4·0	4·6	2·3	3·6	3·2	8·1	5·3	2·7	2·4	6·5	2·4
Estimated Population	85,036				85,781				86,530			

* These Quarters contain 14 weeks.

TABLE No. 10.

DEATH-RATES, ETC., IN THE 33 GREAT TOWNS IN 1896.

	Population estimated to middle of 1896	Corrected Death-Rate.	Recorded Death-Rates.							Deaths under 1 year to a 1,000 Births.
			Principal Zymotic Diseases.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever.	Diarrhœa	
England and Wales		17·10								
England and Wales, *less* 33 Towns		15·84								
33 Towns	10,846,971	20·45	2·86	0·71	0·22	0·38	0·57	0·19	0·79	167
London	4,421,955	19·80	3·14	0·82	0·21	0·60	0·65	0·14	0·72	161
West Ham	261,297	17·34	3·00	0·44	0·21	0·70	0·59	0·23	0·81	165
Croydon	118,006	14·82	1·94	0·56	0·04	0·24	0·52	0·15	0·43	150
Brighton	120,499	16·31	1·63	0·45	0·05	0·16	0·26	0·11	0·60	135
Portsmouth	178,639	16·94	2·11	0·69	0·11	0·11	0·32	0·15	0·73	154
Plymouth	90,276	19·02	2·30	1·04	0·03	0·14	0·19	0·07	0·83	178
Bristol	230,623	17·66	1·90	0·61	0·25	0·16	0·26	0·08	0·52	142
Cardiff	162,690	18·79	2·27	0·23	0·17	0·37	0·63	0·08	0·77	165
Swansea	98,645	18·41	1·18	0·06	0·04	0·10	0·56	0·15	0·25	161
WOLVERHAMPTON	**86,530**	**20·88**	**3·11**	**0·10**	**0·24**	**0·60**	**0·35**	**0·41**	**1·41**	**184**
Birmingham	501,241	23·00	3·57	0·60	0·29	0·53	0·74	0·21	1·20	197
Norwich	108,630	16·65	2·33	1·06	0·04	0·22	0·08	0·19	0·74	164
Leicester	198,659	18·15	2·97	0·60	0·25	0·32	0·25	0·20	1·35	187
Nottingham	229,775	18·82	2·47	0·88	0·11	0·06	0·39	0·34	0·69	168
Derby	101,770	17·26	1·91	0·33	0·11	0·10	0·52	0·20	0·65	151
Birkenhead	109,343	21·10	2·97	1·04	0·29	0·20	0·53	0·23	0·68	177
Liverpool	632,512	24·97	3·01	0·48	0·35	0·24	0·46	0·32	1·16	173
Bolton	120,380	23·49	2·80	0·05	0·33	0·11	0·83	0·39	1·09	168
Manchester	529,561	25·65	3·42	1·06	0·37	0·15	0·67	0·23	0·97	176
Salford	210,707	25·46	4·10	0·94	0·49	0·23	0·88	0·33	1·23	199
Oldham	143,442	23·22	2·91	1·15	0·38	0·24	0·36	0·16	0·62	184
Burnley	102,805	20·11	2·19	0·60	0·04	0·46	0·27	0·12	0·70	170
Blackburn	129,459	20·07	1·82	0·31	0·07	0·08	0·36	0·26	0·74	171
Preston	113,864	22·82	1·86	0·03	0·03	0·10	0·37	0·22	1·11	203
Huddersfield	100,463	19·15	1·60	0·27	0·19	0·21	0·54	0·13	0·26	166
Halifax	94,775	19·29	1·10	0·17	—	0·22	0·34	0·21	0·16	149
Bradford	228,809	18·90	1·58	0·46	0·10	0·07	0·45	0·12	0·38	143
Leeds	402,449	20·78	2·28	0·49	0·17	0·12	0·60	0·21	0·69	169
Sheffield	347,278	21·42	2·91	0·57	0·29	0·16	0·58	0·29	1·02	173
Hull	220,844	19·86	3·32	1·16	0·25	0·23	0·50	0·28	0·90	173
Sunderland	140,386	20·80	3·00	1·00	0·19	0·06	0·53	0·37	0·85	158
Gateshead	98,436	20·50	3·10	1·37	0·26	0·18	0·35	0·22	0·72	172
Newcastle	212,223	20·11	2·08	0·64	0·12	0.18	0·48	0·15	0·51	165